

REMARKS

This is in full and timely response the Office Action dated March 11, 2005.
Reexamination in light of the following remarks is respectfully requested.

Claims 1-18 are currently pending in this application, with claims 1 and 6 being independent. *No new matter has been added.*

Double patenting

Claim 1-4 were rejected under the doctrine of double patenting as being unpatentable over claims 1-5 of U.S. Application No. 10/686,635

Please hold this rejection in abeyance until art rejections are overcome.

Also note that the Office Action has failed to show that *the antenna being formed in a film shape* found within claim 3 of the present invention is also present within the claims of application No. 10/686,635.

Rejections under 35 U.S.C. §102 and 35 U.S.C. §103

Claim 1 was rejected under 35 U.S.C. §102 as allegedly being anticipated by U.S. Patent No. 4,160,234 to Karbo et al. (Karbo)

Claim 2 was rejected under 35 U.S.C. §103 as allegedly being obvious over Karbo in view of U.S. Patent Application Publication No. 2003/0038716 to Piesinger

Claims 3-4 were rejected under 35 U.S.C. §103 as allegedly being obvious over Karbo in view of U.S. Patent Application Publication No. 2003/0156024 to Beckley

If the allowance of the claims is not forthcoming at the very least and a new grounds of rejection made, then a **new non-final Office Action** is respectfully requested at least for the reasons provided hereinbelow.

These rejections are traversed at least for the following reasons.

Claims 2-4 are dependent upon claim 1. Claim 1 is drawn to a mounting structure of a tire monitoring device in which the tire monitoring device transmitting information of an

inside of a tire by using radio waves is mounted on a support core member placed within a cavity of a pneumatic tire, wherein a transmission antenna of the tire monitoring device is disposed on a load support surface in a peripheral portion of the support core member.

Karbo arguably teaches that when the tire 10 becomes deflated and the vehicle is being supported on the load bearing surface 24, the transmitting assembly 30, mounted between the surface 24 and the wheel rim 22, will signal the receiver 16 of the fact via *transmitting antenna* 28 (Karbo at column 3, lines 55-60). Karbo arguably teaches that the *transmitting antenna* 28 preferably is a submultiple of the wavelength of the transmitting frequency, i.e., 1/4, 1/2 wavelength and follows the contour of the insert (Karbo at column 3, lines 60-63). The transmitting assembly 30 and *antenna* 28 are shown molded integrally with the insert 26 (Karbo at column 3, lines 63-64). Nevertheless, Karbo fails to disclose, teach or suggest the transmission antenna 28 being disposed on a load support surface of the insert 26.

The Office Action admits that Karbo fails to disclose, teach or suggest an antenna being disposed on a load support surface in a peripheral portion of the support core member (Office Action at page 3). But as a gap-filler for the features admitted absent from Karbo, the Office Action contends, without any objective evidence, that the skilled artisan would have been motivated to dispose the antenna on the surface of a support core member, for the benefit of less labor which is easy to dispose the antenna on the surface that inside.

In response, the teachings, suggestions or incentives supporting the obviousness-type rejection must be clear and particular. Broad conclusory statements, standing alone, are not evidence. *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

In this regard, Karbo fails to show a support core member. Additionally, the Office Action has failed to provide any objective evidence showing the amount of labor needed to dispose the antenna on the surface of a support core member. Moreover, the Office Action has failed to provide any objective evidence showing that it is easy to dispose the antenna on the surface that inside. As a result, this contention is merely a personal conclusion that is unsupported by any objective evidence.

As a rule, "assertions of technical facts in areas of esoteric technology must always be supported by citation to some reference work recognized as standard in the pertinent art and

the appellant given, in the Patent Office, the opportunity to challenge the correctness of the assertion or the notoriety or repute of the cited reference.” (Citations omitted). *In re Pardo and Landau*, 684 F.2d 912, 916, 214 USPQ 673, 677 (CCPA 1982). The support must have existed at the time the claimed invention was made. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097, 231 USPQ 375, 379 (Fed. Cir. 1986).

In addition, “it is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. The references themselves must provide some teaching whereby the applicant's combination would have been obvious” (citations omitted). *In re Gorman*, 933 F.2d 982, 986, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991). See also *In re Dembiczak*, 175 F.3d 994, 998, 50 USPQ2d 1614, 1616 (Fed. Cir. 1999) (rejection based upon hindsight is reversed).

However, the contention made within the Office Action merely engages in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps.

Also note that the contention made within the Office Action also amounts to nothing more than an “obvious-to-try” situation. Specifically, “an ‘obvious-to-try’ situation exists when a general disclosure may pique the scientist's curiosity, such that further investigation might be done as a result of the disclosure, but the disclosure itself does not contain a sufficient teaching of how to obtain the desired result, or that the claimed result would be obtained if certain directions were pursued.” *In re Eli Lilly & Co.*, 902 F.2d 943, 945, 14 USPQ2d 1741, 1743 (Fed. Cir. 1990). Moreover, “an invention is ‘obvious to try’ where the prior art gives either no indication of which parameters are critical or no direction as to which of many possible choices is likely to be successful.” *Merck & Co. Inc. v. Biocraft Laboratories Inc.*, 874 F.2d 804, 806, 10 USPQ2d 1843, 1845 (Fed. Cir. 1989).

Here, the cited prior art does not contain a sufficient teaching of how to obtain the desired result, or that the claimed result would be obtained if certain directions were pursued. “Obvious to try” is not the standard under §103. *In re O'Farrell*, 853 F.2d 894, 902, 7 USPQ2d 1673, 1680 (Fed. Cir. 1988).

Reference is made to paragraph [0023] of the specification as originally filed which provides that:

In the aforementioned mounting structure of the tire monitoring device, the antenna 6 is disposed on the load support surface in the peripheral portion of the support core member 3. Therefore, the tire monitoring device 5 not only provides information of the inside of the tire under a normal driving condition, but also functions as a warning device which notifies a run-flat traveling limit. Specifically, if the antenna 6 contacts the pneumatic tire 2 on and off during run-flat traveling, the cover 6b serving as a protecting layer of the antenna 6 is gradually broken, and thereby the antenna 6 ultimately stops functioning. Then, transmission of the information of the inside of the tire from the tire monitoring device 5 is lost, and thus the time point of the transmission loss can be taken as an index of the run-flat traveling limit. In this case, it is possible to arbitrarily adjust a distance for that a vehicle continues run-flat traveling until the antenna 6 is broken based on the thickness or material of the cover 6b of the antenna 6.

Piesinger arguably teaches a direct TPMS sensor combined with an ABS having a direct pressure assembly 12 having an antenna 25 (Piesinger at figure 2, paragraph [0018]).

Nevertheless, Piesinger fails to disclose, teach or suggest the transmission antenna 25 being disposed on a load support surface in a peripheral portion of the support core member. In this regard, Piesinger is silent as to the presence of a load support member (Piesinger at figure 1).

Beckley arguably teaches a SAW device with an integral patch antenna.

However, Beckley may be unavailable as prior art at least for the following reasons. The effective filing date of the present application is based upon the filing date of foreign priority documents. But the present application is entitled to benefit of the filing date of Japanese Patent Application No. 2002-312942. Because Japanese Patent Application No. 2002-312942 was filed on October 28, 2002, the present application is entitled to the earlier effective filing date of October 28, 2002. Conversely, Beckley has an application filing date of January 28, 2003,

which is later than the effective filing date of the present application. As a result, *Beckley may be unavailable as prior art to the present application.*

But even if Beckley is available as prior art, Beckley arguably teaches a patch antenna 3 (Beckley at figure 1, paragraph [0013]).

Nevertheless, Beckley fails to disclose, teach or suggest the patch antenna 3 being disposed on a load support surface in a peripheral portion of the support core member. In this regard, Beckley is silent as to the presence of a load support member (Beckley at figure 1).

Withdrawal of this rejection and allowance of the claims is respectfully requested.

New claims

Claim 5 is dependent upon claim 1 and is allowable at least for the reasons provided hereinabove.

Claims 7-18 are dependent upon claim 6. Claim 6 is drawn to a mounting structure of a tire monitoring device comprising:

a support core member disposed within the cavity of a pneumatic tire; and

a transmission antenna disposed on a load support surface of said support core member.

Karbo arguably teaches that when the tire 10 becomes deflated and the vehicle is being supported on the load bearing surface 24, the transmitting assembly 30, mounted between the surface 24 and the wheel rim 22, will signal the receiver 16 of the fact via transmitting antenna 28 (Karbo at column 3, lines 55-60). Karbo arguably teaches that the transmitting antenna 28 preferably is a submultiple of the wavelength of the transmitting frequency, i.e., 1/4, 1/2 wavelength and follows the contour of the insert (Karbo at column 3, lines 60-63). The transmitting assembly 30 and antenna 28 are shown molded integrally with the insert 26 (Karbo at column 3, lines 63-64). Nevertheless, Karbo fails to disclose, teach or suggest the transmission antenna 28 being disposed on a load support surface of the insert 26.

Piesinger and Beckley fail to provide for the features shown hereinabove to be absent from Karbo. Thus, Piesinger and Beckley, either individually or in combination with Karbo, fail to disclose, teach or suggest a transmission antenna disposed on a load support surface of said support core member.

Allowance of the claims is respectfully requested.

Conclusion

For the foregoing reasons, all the claims now pending in the present application are allowable, and the present application is in condition for allowance. Accordingly, favorable reexamination and reconsideration of the application in light of the amendments and remarks is courteously solicited.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone Brian K. Dutton, Reg. No. 47,255, at 202-955-8753.

If any fee is required or any overpayment made, the Commissioner is hereby authorized to charge the fee or credit the overpayment to Deposit Account # 18-0013.

Dated: May 25, 2005

Respectfully submitted,

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